

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ANDRE SCHEELLEN and WIM COPPENS

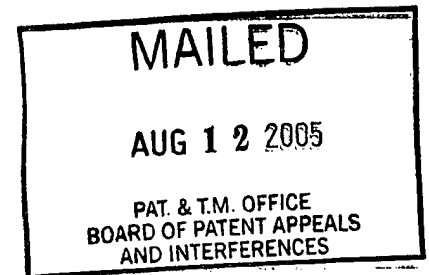
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Appeal No. 2005-1311  
Application No. 09/115,229

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ON BRIEF

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Before GARRIS, PAK, and JEFFREY T. SMITH, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 26-41.<sup>1</sup>

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<sup>1</sup>We note the following claim informality which is deserving of correction. On line 1 of claim 27, the phrase "said exhibits a particle size distribution" should read --said talc exhibits a particle size distribution--.

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The subject matter on appeal relates to an article of manufacture selected from the group consisting of a pipe and a pipe coupling comprising a polyethylene-based composition which includes talc in an amount of less than 1 part per 100 parts by weight of polyethylene. According to the appellants, the addition of such small amounts of talc to high density polyethylene provides compositions which make possible the manufacture of articles such as pipes and pipe couplings for which the creep resistance is significantly improved without affecting the other mechanical properties of the articles. See, for example, lines 9-15 on specification page 2, the test results shown in Table 1 on specification page 8 as well as the test results shown in the table on page 2 of the Scheelen declaration of record. This appealed subject matter is adequately illustrated by claims 26 and 38, the sole independent claims before us, which read as follows:

26. An article of manufacture selected from the group consisting of a pipe and a pipe coupling comprising a polyethylene-based composition wherein the polyethylene exhibits a standard density, measured at 23°C according to ASTM Standard D 972, of greater than 940 kg/m<sup>3</sup> and wherein the polyethylene-based composition comprises talc in an amount of less than 1 part per 100 parts by weight of polyethylene.

38. An article of manufacture selected from the group consisting of pipe and pipe coupling, which comprises polyethylene wherein the polyethylene exhibits a standard density, measured at 23°C according to ASTM Standard D 972, of

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greater than 940 kg.m<sup>3</sup> and talc in an amount which does not exceed 0.5 parts per 100 parts by weight of polyethylene.

The references set forth below are relied upon by the examiner as evidence of obviousness:

Wooster et al. (Wooster)	5,631,069	May 20, 1997
Jenkins et al. (Jenkins)	5,049,441	Sep. 17, 1991

Claims 26-31 and 33-41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jenkins.

Claims 26-41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wooster.

We refer to the brief and reply brief and to the answer for a discussion of the respective viewpoints expressed by the appellants and by the examiner concerning the above noted rejections.

#### OPINION

For the reasons which follow, neither of these rejections can be sustained.

As correctly argued by the appellants, each of the independent claims on appeal distinguishes from Jenkins by requiring an article of manufacture selected from the group consisting of a pipe and a pipe coupling. In Jenkins, the article of manufacture is a film having improved tear-resistance and puncture-resistance (e.g., see the Abstract). In support of

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her contrary view, the examiner points to the paragraph bridging columns 2 and 3 of Jenkins which discloses that a seamless tube is extruded as an intermediate product during manufacture of patentee's film. According to the examiner, "[g]iven the limited structure recited in the present claims, it is the Examiner's position that the claimed structure of a pipe has been met [i.e., by the aforementioned seamless tube]" (answer, page 7).

On the record of this appeal, the examiner has proffered no claim interpretation analysis in explanation of her unembellished contention that the appellants' claimed pipe encompasses the intermediate seamless tube formed during manufacture of Jenkins' film. In the absence of such analysis, it is challenging to discern any merit in the examiner's position. Regardless, even assuming that Jenkins satisfies this requirement of the appealed claims, the rejection based on this reference still would be improper for the reasons expressed below.

The independent claims on appeal also distinguish from Jenkins by requiring a maximum talc amount which is distinctly below the minimum talc amount disclosed by patentee. Regarding this claim distinction, the examiner states that, "[s]ince Jenkins . . . teaches talc having a lower end range of 1%, the Examiner would like to note that only a very slight decreased in

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the weight % of talc would fall within the presently claimed range, i.e. .94 wt%, .95 wt%, etc." (answer, page 5). This statement, which concerns only the broad range of talc amounts defined by appealed independent claim 26, is based upon an improper comparison of the percentages disclosed by Jenkins and claimed by the appellants. As repeatedly explained in the brief and reply brief, when patentee's weight percentage based on composition is converted to a weight percentage based on polyethylene as required by the appealed claims, the lowest talc amount taught by Jenkins is 1.05 parts of talc per 100 parts by weight of polyethylene. The examiner has inappropriately failed to even acknowledge, much less rebut, the appellants' repeatedly stated position on this matter.

In any event, the examiner has reached a conclusion of obviousness with respect to talc amounts far below those discussed above such as the 0.5 amount of independent claim 38 and the 0.25 amount of dependent claim 28. Specifically, the examiner concludes that, "[s]ince Jenkins . . . teach[es] talc merely used as a filler, it would have been obvious to one having ordinary skill in the art to have used less filler if e.g. manufacturing costs were not an issue" (answer, pages 4-5). This

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conclusion of obviousness is not well taken for a number of reasons.

First, we completely agree with the appellants that a consideration of manufacturing costs would have motivated an artisan to use more not less talc filler in the polyethylene composition of Jenkins. It may be that the examiner is urging that an artisan would have "used less filler if [the resulting increase in] manufacturing costs were not an issue" (id.). However, the examiner has provided no explanation of why an artisan would have been motivated to pay the higher manufacturing costs associated with use of less talc filler.

Additionally, it is important to bear in mind that Jenkins is not concerned with properties (or for that matter products) of the type disclosed and claimed by the appellants. As mentioned earlier, the small amounts of talc defined by the appealed claims are for the purpose of achieving pipes and pipe couplings for which creep resistance has significantly improved without affecting other mechanical properties. On the other hand, Jenkins is concerned with completely different properties, namely, the improved tear-resistance and puncture-resistance of films (e.g., again see the Abstract). Under these circumstances, no basis exists for believing that the properties (and products)

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desired by Jenkins would be even achievable with talc amounts of the type here claimed which are clearly below the lowest quantity taught by patentee. Compare In re Sebek, 465 F.2d 904, 906-07, 175 USPQ 93, 95 (CCPA 1972).

In light of the foregoing, it is apparent that the examiner has failed to carry her initial burden of establishing a prima facie case of obviousness. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). We are compelled by this circumstance to hereby reverse the examiner's section 103 rejection of claims 26-31 and 33-41 as being unpatentable over Jenkins.

As for the rejection based on Wooster, this reference is directed to articles of manufacture such as pipes made from polyethylene materials having improved impact strength (e.g., see the Abstract). According to Wooster, "[a]llthough generally not required, the molded material of the present invention can also contain additives to enhance antiblocking and coefficient of friction characteristics including . . . talc" (column 14, lines 22-26). Because the Wooster patent contains no teaching of any amounts for such talc additives, the independent claims on appeal distinguish from this patent by the amount requirements previously discussed. With regard to this claim distinction, the

examiner makes the following conclusion of obviousness on page 6 of the answer:<sup>2</sup>

Since Wooster . . . teaches that it is known to include additives, such as talc, in molded polyethylene compositions, it would have been obvious to one having ordinary skill in the art to have included the talc in an effective amount to have imparted antiblocking and coefficient of friction characteristics. The determination of such amount of talc to impart such properties is deemed to be routine optimization and well within the level of skill of the ordinary artisan. Furthermore, it would have been obvious to one having ordinary skill in the art to have used more or less of the talc additive if manufacturing costs were of [sic] an issue.

Wooster's teaching of talc as an additive for his polyethylene materials relates to properties which differ from those disclosed and claimed by the appellants. Thus, the examiner's obviousness conclusion is deficient for reasons analogous to those discussed previously with respect to Jenkins. That is, no basis exists for believing that the antiblocking and

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<sup>2</sup> Although the answer does not contain an express statement by the examiner of this claim distinction, the distinction is implicit in the examiner's obviousness conclusion. Also implicit in this obviousness conclusion is the apparent finding by the examiner that the independent claims on appeal require the presence of at least some amount of talc. Indeed, any attempt to interpret these independent claims as encompassing an article comprising polyethylene without any talc at all (which seemingly would render such interpreted claims anticipated by Wooster) would be unreasonable and inconsistent with the appellants' specification (e.g., see lines 9-20 on specification page 2 and the Table 1 data on specification page 8 wherein the comparative example is a talc-free composition). Compare In re Hyatt, 211 F.2d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 1998).



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coefficient of friction properties desired by Wooster would be even achievable with talc amounts of the type required by the appealed claims. Significantly, in stating that "[t]he determination of such amount of talc to impart such properties [i.e., the antiblocking and coefficient of friction properties taught by Wooster] is deemed to be routine optimization" (answer, page 6), the examiner has implicitly assumed that the so-determined talc amounts would correspond to the appellants' claimed talc amounts. Based on the record before us, this implicit assumption must be regarded as nothing more than speculation, unfounded assumptions or hindsight reconstruction on the examiner's part. It is long settled that a section 103 rejection must rest on a factual basis without resort to speculation, unfounded assumptions or hindsight reconstruction. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967).

For these reasons, we again determine that the examiner has failed to carry her initial burden of establishing a prima facie case of obviousness. Oetiker, id. Therefore, we also hereby reverse the examiner's section 103 rejection of claims 26-41 as being unpatentable over Wooster.

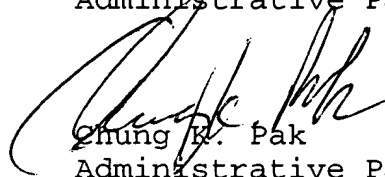
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The decision of the examiner is reversed.

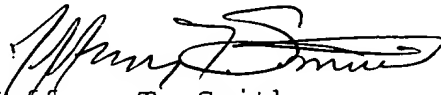
REVERSED



Bradley R. Garris  
Administrative Patent Judge



Chung K. Pak  
Administrative Patent Judge



Jeffrey T. Smith  
Administrative Patent Judge

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BRG:tdl

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